

version showing the changes made by the present amendment.

Kindly amend the above-identified application as set forth below:

In the Claims:

Please amend claims 1, 5, 23 and 31 and cancel claim 10 as follows:

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1. (Amended) A process for the simultaneous production of xylitol and ethanol from a hydrolyzed lignocellulose-containing material, comprising

providing a starting material of hydrolyzed lignocellulose-containing material, having a ratio of glucose/xylose, wherein the ratio of glucose/xylose is between about .25 to about 8, and glucose content is greater than about 10% of carbohydrates in the starting material;

fermenting said starting material with a yeast strain which is capable of converting free xylose to xylitol and free hexose present to ethanol to form a fermented product comprising xylitol, ethanol and yeast, wherein during fermentation over about 50% of the xylose in the starting material is converted to xylitol and over about 40% of the glucose in the starting material is converted to ethanol;

recovering the resulting ethanol by distillation; and

recovering xylitol by chromatographic separation from a bottom product of distillation.

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5. (Amended) The process according to Claim 1, further comprising crystallizing pure xylitol.

Cancel claim 10.

23. (Amended) A process for the simultaneous production of xylitol and ethanol from a hydrolyzed lignocellulose-containing material, wherein the lignocellulose-containing material is selected from the group consisting of softwood, birch, beech, poplar, alder, plants, plant constituents, straw, hulls of wheat, corn, oat, barley, corn cobs, corn stems, nutshells, bagasse, cottonseed bran, wood chips, sawdust, sulphite spent liquor from woodpulp processing, waste from paper processing, ^{and} waste from woodpulp processing, comprising:

providing a starting material of the hydrolyzed lignocellulose-containing material, having a ratio of glucose/xylose, wherein the ratio of glucose/xylose is between about .25 to about 8 and wherein glucose content is greater than about 10% of carbohydrates in the starting material;

fermenting said starting material to produce a fermented solution with a yeast capable of converting free xylose present to xylitol and free hexose present to ethanol, said yeast selected from the group consisting of a yeast of the genera *Candida*, *Pichia*, *Pachysolen*, and *Debaryomyces*, said fermenting comprising reducing said free xylose to xylitol and reducing said hexose to ethanol, and said fermented solution comprising xylitol, ethanol, and spent yeast; wherein during fermentation over about 50% of the xylose in the starting material is converted to xylitol and over about 40% of the glucose in the starting material is converted to ethanol;

separating a substantial portion of said spent yeast from said fermented solution to produce a substantially clarified solution comprising ethanol and xylitol, said clarified solution comprising substantially less spent yeast by weight on a dry solids (substance) basis than said spent yeast in said fermented solution, and said separating

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comprising at least one separating method selected from group consisting of filtration, centrifugation and decanting;

recovering ethanol by distillation;

recovering xylitol by chromatographic separation; and

crystallizing said xylitol to produce xylitol crystals.

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31. (Amended) A process for the simultaneous production of xylitol and ethanol from a starting material of lignocellulose-containing material, comprising:

partially hydrolyzing said lignocellulose-containing material and subjecting said

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material to extraction to produce a prehydrolysate; wherein the prehydrolysate obtained from the extraction is fermented to convert xylose to xylitol, which is separated

chromatographically and crystallized; wherein a final hydrolysis is carried out on the

extracted material resulting in a hydrolysis product having a ratio of glucose/xylose, wherein the ratio of glucose/xylose is between about 25 to about 8 and wherein glucose content is

greater than about 10% of carbohydrates in the starting material; the hydrolysis product being

16 fermented to convert hexoses to ethanol, followed by recovery of the ethanol by distillation;

wherein during fermentation over about 50% of the xylose in the hydrolysis product is

converted to xylitol and over about 40% of the glucose in the hydrolysis product is converted to ethanol.

REMARKS

Reconsideration of the subject patent application is respectfully requested in view of the preceding amendments and accompanying remarks.